

## WHAT IS CLAIMED

1. An image forming apparatus having a pair of rollers for transferring a copy sheet pinching it between the rollers, wherein said pair of rollers consists of a rigid roller and an elastic roller pressed against said rigid roller, the rollers being connected to a driving mechanism composed so that the peripheral velocities of both the rollers are approximately equal, and the diameter of said elastic roller is determined in the range between such first diameter as the peripheral velocity of said elastic roller at the part depressed due to the pressing of the elastic roller against the rigid roller without the copy sheet between the rollers coincides with the peripheral velocity of said rigid roller and such second diameter as the peripheral velocity of the rigid roller assumed to have a diameter increased by the thickness of the copy sheet (rigid roller with increased diameter) coincides with the peripheral velocity of the elastic roller at the part depressed due to the pressing of the elastic roller against said rigid roller with increased diameter without the copy sheet between the rollers.

2. The image forming apparatus according to claim 1, wherein the medial design value of the diameter of said elastic roller is determined to be about mid-value between said first and second diameter.

3. The image forming apparatus according to claim 1 or 2, wherein said elastic roller is a roller having rubber of hardness of JIS-A Hs65 to 90, preferably Hs70 to 80 wound around the periphery thereof.

4. The image forming apparatus according to claim 1, wherein

said first diameter is 1.005 times the diameter of the elastic roller before correction and said second diameter is 1.012 times the diameter of the elastic roller before correction when the elastic roller is depressed by 0.5 % of its diameter by the pressing of the elastic roller against the rigid roller.